New Academic Affiliate Application:

State University of New York at Oswego - 2010

The Department of Earth Sciences at the State University of New York at Oswego (SUNY-Oswego) is home to a B.S. Meteorology degree program. The B.S. degree meets or exceeds the guidelines from the American Meteorological Society and the National Weather Service. The program consists of four, full-time tenure track faculty with a current enrollment of approximately 100 undergraduate majors. In the six years from 2003-2009, the university has awarded 74 B.S. Meteorology degrees. In addition to meteorology, the Department has 5 additional faculty and awards degrees in Geology and Geochemistry.

The four meteorology faculty members all have PhDs in the atmospheric sciences. Faculty members have expertise in many areas of meteorology including: weather analysis and forecasting, meteorological instrumentation, air pollution, atmospheric dynamics, tropical meteorology, and mesoscale meteorology. The Department is quite active in the areas of observing, modeling, and forecasting lake-effect snow storms and also convective storms. This work is and has been funded through a number of both NSF and NOAA/NWS/Comet grants and the results of their research are presented at regional and national conferences and appear in peer-reviewed journals. The scale and scope of the departmental research is typical of that found at undergraduate institutions where the focus in on student learning.

The physical facilities of the program are undergoing several major improvements. The program has a computer classroom with 25 workstations used for visualizing real-time and archived weather data. Students and faculty use a number of software tools developed by Unidata including GEMPAK/GARP. Recently the Department has received several grants to purchase instrumentation to be used in both the classroom and research. The instrumentation includes: a mobile radiosonde and tethersonde system as well as a 10 meter tower with a state-of-the-art automated surface observing system. Additionally, the program is looking forward to a building renovation project to be completed in 2013.

Faculty and students are already involved in several UCAR activities including the use of Unidata products and software such as the COMET-Meted modules and the WRF mesoscale model. They recently submitted a proposal to use the NCAR Doppler-on-wheels facility for lake effect snow studies and are looking forward to participating actively in the UCAR and Academic Affiliate meetings.

Overall the application materials indicate that SUNY-Oswego meets the criteria for academic affiliation membership in UCAR. Therefore the Membership committee recommends that SUNY-Oswego be admitted to the Academic Affiliates.